

**NORTH CAROLINA DIVISION OF
AIR QUALITY**

Air Permit Review

Permit Issue Date:

Region: Mooresville Regional Office
County: Rowan
NC Facility ID: 8000003
Inspector's Name: Tonisha Dawson
Date of Last Inspection: 08/26/2015
Compliance Code: 3 / Compliance - inspection

Facility Data Applicant (Facility's Name): Carolina Stalite Company Facility Address: Carolina Stalite Company 16815 Old Beattys Ford Rd. Gold Hill, NC 28071 SIC: 3281 / Cut Stone And Stone Products NAICS: 327991 / Cut Stone and Stone Product Manufacturing Facility Classification: Before: Title V After: Title V Fee Classification: Before: Title V After: Title V			Permit Applicability (this application only) SIP: NSPS: NESHAP: PSD: PSD Avoidance: NC Toxics: 112(r): Other:				
Contact Data			Application Data				
Facility Contact Joe Konzelmann Environmental Coordinator (704) 279-2166 PO Drawer 1037 Salisbury, NC 28145	Authorized Contact Charles Newsome General Manager (704) 636-5231 PO Drawer 1037 Salisbury, NC 28145+1037	Technical Contact Tim Agner Manager of Engineering Services (704) 279-2166 PO Drawer 1037 Salisbury, NC 28145	Application Number: 8000003.16B Date Received: 05/24/2016 Application Type: Renewal Application Schedule: TV-Renewal Existing Permit Data Existing Permit Number: 03059/T46 Existing Permit Issue Date: 12/04/2013 Existing Permit Expiration Date: 02/28/2017				
Total Actual emissions in TONS/YEAR:							
CY	SO2	NOX	VOC	CO	PM10	Total HAP	Largest HAP
2014	1141.67	541.42gbcd	0.8000	7.02	30.71	1.25	0.6291 [Hydrogen chloride (hydrochlori]
2013	913.45	544.48	0.7700	6.22	46.86	1.25	0.6320 [Hydrogen chloride (hydrochlori]
2012	684.35	446.60	0.7900	7.19	38.24	1.02	0.5160 [Hydrogen chloride (hydrochlori]
2011	465.96	446.83	0.8200	7.34	38.02	1.03	0.5165 [Hydrogen chloride (hydrochlori]
2010	713.24	435.38	0.1600	2.99	37.18	0.9472	0.5028 [Hydrogen chloride (hydrochlori]
Review Engineer: Urva Patel Review Engineer's Signature: Date:					Comments / Recommendations: Issue 03059/T47 Permit Issue Date: Permit Expiration Date:		

1. Purpose of Application:

Currently, Stalite holds Title V Permit No. 03059T42 with an expiration date of February 28, 2017. The Title V renewal application (**Application No. 8000003.16B**) was received on May 24, 2016, which was at least nine months prior to the expiration date of the Title V permit. Therefore, the existing permit shall not expire until the renewal permit has been issued or denied. All terms and conditions of the existing permit shall remain in effect until the renewal permit has been issued or denied.

In addition, the application requests that the four gasoline emergency generators (IES1; IES2, IES3, and IES3a) be removed from the air permit. These engines are not operable and have not been operated for many years.

2. Facility Description:

The Carolina Stalite Company is a lightweight aggregate manufacturing facility located in Gold Hill, Rowan County, North Carolina. The facility manufactures lightweight aggregates, which are generally used in concrete materials and horticulture industry. The facility receives aggregate from Vulcan Materials – Gold Hill Quarry and process it through kilns to get the lightweight characteristics. Operations resulting in air emissions from the facility include raw material processing (crushing, screening, storage, and handling), raw material heating and expansion in rotary direct-fired kilns, and product crushing, screening, handling, and storage. The expanded aggregate known as “clinker” is then crushed and screened to the desired product size. Stalite GH has two primary product streams with each having a dedicated set of equipment. Currently “Block Mix” represents about 30% of production while “Structural Material” makes up the remaining 70%. The rotary kilns are natural gas and coal fired, and there are some particulate emissions associated with coal handling and storage. Bagfilters control particulate emissions from the kilns and dust silo exhausts. Lime slurry is injected in the duct work after the kilns to control sulfur dioxide emissions. Fugitive dust emissions from the conveyors, screens, pug mill, and stockpiles are controlled by the use of water sprays at selected locations to maintain inherent moisture in the conveyed materials at a minimum of 6% moisture at all points.

The facility permit includes 7 kilns (Kilns 1 – 7), 7 flyash/kiln dust storage silos, a lime storage silo, 90 slate/aggregate conveyors, 5 crushers, 6 screens, a pug mill, a portable Trommel screen, a temporary portable Trommel screen and a portable jaw crusher. The potential annual throughput through the entire Stalite GH facility is based on the kiln production capacity of 1,511,100 tons per year (172.5 tph x 8760 hr/yr).

3. History / Background / Application Chronology:

Permit History Since Last Permit Renewal

March 07, 2012	This permit includes “Part II” significant modification and renewal of a Title V permit, with “Part II” significant modification received on March 28, 2005 and the application for renewal of a Title V permit received on February 28, 2006. The “Part II” application was to incorporate the PSD requirements originating in Permit No. 03059T30 into the Title V permit; to update the SO ₂ monitoring provisions; to add “CAM” designations to kilns (ID Nos. ES-1 through ES-6); to add PM-10 CAM requirements to the table or applicable requirements. Air Permit No. 03059T44 issued with a permit expiration date of February 28, 2017.
November 19, 2012	Title V Air Permit No. 03059T45 issued. Under this modification, approved (modeled) emission limits for chromium (VI) as soluble chromate compounds were added to the permit.
December 04, 2013	Title V Air Permit No. 03059T46 issued. Under this modification, the new sources single deck screen SD-1; portable loader ES-PLS-1; and a stacker conveyor ES-SWC-2 were added to this permit.
September 15, 2016	Permit Condition 2.1 A.10 (15A NCAC 02D. 0530(u): USE OF PROJECTED ACTUAL EMISSIONS TO AVOID APPLICABILITY OF PREVENTION OF SIGNIFICANT DETERIORATION REQUIREMENTS) was removed as it has fulfilled all the requirements of compliance. It is in compliance with Monitoring/Recordkeeping/Reporting and Testing.

Application Chronology

May 24, 2016	Received application for permit renewal
May 24, 2016	Sent acknowledgement letter indicating that the application for permit renewal was complete.

4. Summary of Changes to the Existing Permit (Permit No. 03059T46):

Page No.	Section	Description of Changes
Cover Letter	N/A	Update cover letter for minor modification as per 02D .0515 procedures; application, permit numbers, dates, PSD increment statement and Chief name.
Cover Letter	Cc	Added a new cc for “Connie Horne” (Cover Letter only)
Permit Cover	N/A	Insert new issuance and complete application date and application number.
--	Insignificant Activities List	<ul style="list-style-type: none"> Removed three 40 hp gasoline emergency engines (ID No. IES1 – IES3). Removed 75 hp gasoline emergency engine (ID Nos. IES3a). Removed two No. 6 fuel oil tanks (ID Nos. IES-FT1 and IES-FT2).
3-5	Section 1	<ul style="list-style-type: none"> Added reference page no. for each piece of equipment. Added Emission Source ID No.: ES-SWC-2 Removed Note “*” from page no. 5
3	Section 1	<ul style="list-style-type: none"> Added “Subpart UUU” in Emission Source ID:ES-17
7	2.1. A.1.b 2.1. A.1.d.ii 2.1 A.1.f 2.1 A.1.g	<ul style="list-style-type: none"> Removed language “found in Section 3” Added a parenthetical phrase i.e. for each 12-month period following the initial inspection Changed “by January 30” to “postmarked on or before January30 Revised format and created a new paragraph “g”
8	2.1. A.2.b	<ul style="list-style-type: none"> Removed language “found in Section 3”
9	2.1 A.2.1 2.1 A.2.1.iii	<ul style="list-style-type: none"> Changed “by January 30” to “postmarked on or before January30 Revised format, removed the designation “iii” as subparagraph and continued as paragraph “i” itself
10	2.1. A.3.a 2.1 A.3.b 2.1. A.3.d 2.1. A.3.d.ii 2.1. A.3.e 2.1. A.3.f	<ul style="list-style-type: none"> Removed reference “[15A NCAC 02D .0521(d)]” Removed reference “[15A NCAC 02D .0521(c)]” Reworded the same paragraph for better understanding of Monitoring compliance Renumbering of the 02D.2610 condition i.e. 2610 instead of 2601 Changed “log” to “logbook” Changed “by January 30” to “postmarked on or before January 30”
11	2.1 A.4.c 2.1 A.4.d	<ul style="list-style-type: none"> Revised reference i.e. Section “2.1 A.4.b” instead of “2.1 A.4.a” Added control device ID No.
12	2.1 A.4.f 2.1 A.5.d	<ul style="list-style-type: none"> Revised reference i.e. 15A NCAC 02D .0524 instead of 40 CFR 60.11(d) Removed this permit condition as this testing has been completed and indicated “RESERVED”
13	2.1 A.5.h.iv 2.1 5.i 2.1 A.5.i	<ul style="list-style-type: none"> Corrected reference – Section 2.1 A.5.a.ii and Section 2.1 A.5.b.ii Corrected reference – “2.1 A.5.a.ii (ID No. ES-2) and 2.1 A.5.b.ii. (ID No. ES-2)” instead of “2.1 A.5.b.i or ii” Revised reference i.e. 15A NCAC 02D .0530 instead of 15A NCAC 02D.0516
14	2.1 A.5.m 2.1 A.8.c	<ul style="list-style-type: none"> Reworded the same paragraph for better understanding of Reporting compliance and made this PSD reporting period semi-annual to match all others. Added a line in the bracket “An excursion occurs when...”
15	2.1 A.8.d	<ul style="list-style-type: none"> Added a sentence “the Permittee shall conduct an inspection...” Revised a parenthetical phrase i.e. “1.05” instead of “0.05”
15	2.1 A.8.h	<ul style="list-style-type: none"> Added a “Reporting” requirement as “h”

Page No.	Section	Description of Changes
16	2.1 A.9.b	<ul style="list-style-type: none"> Revised VE observations i.e. “daily” instead of “weekly” Removed a parenthetical phrase Revised reference i.e. Section “2.1 A.3.d” instead of “2.1 A.3.e”
16	2.1 A.9.c	<ul style="list-style-type: none"> Revised a VE limit as at 10% opacity, it would be violation of opacity standard instead of an excursion i.e. “8%” instead of “10” Added a sentence “The excursion...” Removed a parenthetical phrase
16	2.1 A.9.d	<ul style="list-style-type: none"> Added a sentence “The excursion...” Removed a parenthetical phrase
16	2.1 A.9.e.ii	<ul style="list-style-type: none"> Revised VE observations i.e. “daily” instead of “weekly”
16	2.1 A.9.g	<ul style="list-style-type: none"> Added a “Reporting” requirement as “g”
17	2.1 A.10 Sec 2. B. Table 2.1. B.1.c.ii	<ul style="list-style-type: none"> Removed condition as Kiln No. 7(ID No. ES-17) was in compliance with Monitoring/Recording/Reporting. The Permittee conducted performance test which was in compliance and no additional testing is required for Kiln No. 7(ID No. ES-17). Added “State-enforceable only” in parenthesis with Section 2.2 A.1 added language as per the shell conditions 02D. 0515, contain parenthetical phrase
18	2.1 B.1.e 2.1. B.2.c 2.1. B.2.c.ii 2.1. B.2.d 2.1. B.2.e	<ul style="list-style-type: none"> Changed “by January 30” to “postmarked on or before January 30” Updated “Visible Emissions Monitoring” condition based on TVCOND67 Renumbering of the 02D.2610 condition i.e. 2610 instead of 2601 Changed “log” to “logbook” Changed “by January 30” to “postmarked on or before January 30”
19	Sec 2. C Table 2.1 C.1.d	<ul style="list-style-type: none"> Added “State-enforceable only” in parenthesis with Section 2.2 A.1 Corrected reference i.e. “through” instead of “or”
20	2.1 C.1.f 2.1. C.1.g 2.1. C.1.h	<ul style="list-style-type: none"> Removed reference “2.1.C.3” from the paragraph as it does not exist Changed “log” to “logbook” Changed “by January 30” to “postmarked on or before January 30”
20	2.1. C.2.c 2.1. C.2.c.ii 2.1. C.2.d 2.1. C.2.e	<ul style="list-style-type: none"> Updated “Visible Emissions Monitoring” condition based on TVCOND67 Renumbering of the 02D.2610 condition i.e. 2610 instead of 2601 Changed “log” to “logbook” Changed “by January 30” to “postmarked on or before January 30”
21	Sec 2. D Table 2.1. D.1.d 2.1 D.1.e 2.1. D.2.c 2.1. D.2.c.ii	<ul style="list-style-type: none"> Added “State-enforceable only” in parenthesis with Section 2.2 A.1 Added non-compliance statement Changed reference i.e. “c through e” instead of “d, e, f”; “c and d” instead of “d and e” Updated “Visible Emissions Monitoring” condition based on TVCOND67 Renumbering of the 02D.2610 condition i.e. 2610 instead of 2601
22	2.1. D.2.d 2.1. D.2.e Sec 2. D Table	<ul style="list-style-type: none"> Changed “log” to “logbook” Changed “by January 30” to “postmarked on or before January 30” Added “State-enforceable only” in parenthesis with Section 2.2 A.1
23	2.1. E.1.d	<ul style="list-style-type: none"> Added non-compliance statement and changed reference i.e. “E.1.a” instead of “E.1.c”

Page No.	Section	Description of Changes
23	2.1. E.2.c 2.1. E.2.c.ii 2.1. E.2.d 2.1. E.2.e	<ul style="list-style-type: none"> Updated “Visible Emissions Monitoring” condition based on TVCOND67 Renumbering of the 02D.2610 condition i.e. 2610 instead of 2601 Changed “log” to “logbook” Changed “by January 30” to “postmarked on or before January 30”
24	2.1. F.1.d 2.1 F.1.e 2.1. F.2.c 2.1. F.2.c.ii	<ul style="list-style-type: none"> Added non-compliance statement Changed reference i.e. “c through e” instead of “d, e, f”; “F.1.a” instead of “F.1.c” Updated “Visible Emissions Monitoring” condition based on TVCOND67 Renumbering of the 02D.2610 condition i.e. 2610 instead of 2601
25	2.1. F.2.d 2.1. F.2.e Sec 2. G Table 2.1 G.1.f	<ul style="list-style-type: none"> Changed “log” to “logbook” Changed “by January 30” to “postmarked on or before January 30” Added “State-enforceable only” in parenthesis with Section 2.2 A.1 Changed reference i.e. “c and d” instead of “through e”
26	2.1. G.1.g 2.1. G.1.h 2.1. G.2.c 2.1. G.2.c.ii 2.1. G.2.d 2.1. G.2.e	<ul style="list-style-type: none"> Changed “log” to “logbook” Changed “by January 30” to “postmarked on or before January 30” Updated “Visible Emissions Monitoring” condition based on TVCOND67 Renumbering of the 02D.2610 condition i.e. 2610 instead of 2601 Changed “log” to “logbook” Changed “by January 30” to “postmarked on or before January 30”
28	2.2. B.1	<ul style="list-style-type: none"> Changed “State only requirement” to “State-enforceable only”
29	2.2. B.2	<ul style="list-style-type: none"> Changed “State only requirement” to “State-enforceable only”
30	Section 3	<ul style="list-style-type: none"> Section was revised from v.3.6 to current shell version 4.0 (12/17/2015). Only minor changes were made. Changes include: <ul style="list-style-type: none"> Updating regulation references from “2D” and “2Q” to “02D” and “02Q” to be consistent with regulation nomenclature. References to DENR were revised to DEQ

5. Compliance Status:

DAQ has reviewed the compliance status of this facility. During the most recent inspection conducted on August 26, 2015, Tanisha A Dawson of the of the Mooresville Regional Office indicated that the facility appeared to be in compliance with all applicable requirements. Additionally, a signed Title V Compliance Certification (Form E5) indicating that the facility was in compliance with all applicable requirements was submitted with Application No. 8000003.16A on May 24, 2016.

Five-year Compliance History:

- On April 29, 2014, an EPA Reference Method 6C sulfur dioxide emission stack test was performed on the lightweight aggregate rotary expanding kiln (ID No. ES-5). The June 24, 2014 test indicated compliance with the referenced sulfur dioxide emission limit. On February 6, 2015 the Mooresville Regional Office issued a Notice of Violation/ Notice of Recommendation for an exceedance of the BACT SO₂ emission limit on the lightweight aggregate rotary expanding kiln (ID No. ES-5).
- On September 11, 2014, a Notice of Deficiency was issued for missing weekly records required under Air Permit No. 03059T46.
- The facility was inspected on September 14, 2015 and appeared to be in compliance with all applicable air quality regulations.

6. Regulatory Review

Unless specifically noted, a detailed discussion of the following list of the applicable equipments, control devices, and all associated permit conditions is not included as applicability status has not changed. The permit conditions have been modified to reflect the most current language, where its necessary. The facility is required to be in continued compliance.

- A. Lightweight aggregate kilns (ID Nos. ES-1 through ES-6, and ES-17) with associated hydrated lime slurry injection systems (ID Nos. CD-1a through CD-6a, and CD-17a), bag filters (ID Nos. CD-1b through CD-6b, and CD-17b).**

Lime injection chamber (ID No. CD-2LIC) and packed bed scrubber system (ID No. CD-2QDS) installed on Kiln No. 2 (ID No. ES-2).

1. Applicable Regulatory Requirements:

- 15A NCAC 2D .0511: Particulates from Lightweight Aggregate Processes
- 15A NCAC 2D .0516: Sulfur Dioxide Emissions from Combustion Sources
- 15A NCAC 2D .0521: Control of Visible Emissions
- 15A NCAC 2D .0524: New Source Performance Standards (NSPS UUU)
- 15A NCAC 2D .0530: Prevention of Significant Deterioration
- 15A NCAC 2D .0535: Excess Emissions Reporting and Malfunctions
- 15A NCAC 2D .0540: Particulates from Fugitive Dust Emission
- 15A NCAC 2D .0614: Compliance Assurance Monitoring
- 15A NCAC 2D .1100: Control of Toxic Air Pollutants
- 15A NCAC 2D .1402: Nitrogen Oxides Applicability
- 15A NCAC 2Q .0711: TAP Procedures - Emission Rates Requiring a Permit

- B. Flyash and lime storage silos (ID Nos. ES-7 through ES-10 and ES-16) and bagfilters (ID Nos. CD-7a, CD-7b, CD-8 through CD-10, and CD-16).**

Flyash/dust storage silo (ID No. ES-19) and bagfilter (ID No. CD-19)

1. Applicable Regulatory Requirements:

- 15A NCAC 2D .0515: Particulates from Miscellaneous Industrial Processes
- 15A NCAC 2D .0521: Control of Visible Emissions
- 15A NCAC 2D .0530: Prevention of Significant Deterioration (**ID No. ES-19 only**)
- 15A NCAC 2D .0540: Particulates from Fugitive Dust Emission
- 15A NCAC 2D .1100: Control of Toxic Air Pollutants
- 15A NCAC 2Q .0711: TAP Procedures - Emission Rates Requiring a Permit

- C. Crushing, screening and handling equipment (ID No. ES-11);**

Conveyors (ID Nos. ES-12, ES-23a, ES-23b, ES-25, ES-26a, ES-27, ES-28, ES-SWC-1 and ES-SWC-2) and water sprays (ID Nos. CD-11, CD-12, CD-23a, CD-23b, and CD-26a);

One portable C50 Telsmith jaw crusher (50 inches by 26 inches; ID No. ES-PJ-C1) with integral feeder and conveyor powered by one Caterpillar C9 350 hp diesel engine with water spray;

One portable trammel screen (8-foot diameter by 30 ft long; ID No. ES-TS-1) powered by one 139 hp diesel engine;

One feed hopper (ID No. ES-SWH-1);

One Portable Loader (18" by 40' long; ID No. ES-PLS-1); and

Single Deck Screen (SD-1).

1. Applicable Regulatory Requirements:

- 15A NCAC 2D .0511: Particulates from Lightweight Aggregate Processes
- 15A NCAC 2D .0521: Control of Visible Emissions
- 15A NCAC 2D .0540: Particulates from Fugitive Dust Emission
- 15A NCAC 2D .1100: Control of Toxic Air Pollutants
- 15A NCAC 2Q .0711: TAP Procedures - Emission Rates Requiring a Permit

2. Changes per the Title V Permit Renewal

- Add a stacker conveyor; ES-SWC-2 to be added to existing Sand Washer SWC.
- The Screen, Loader and Conveyor is listed in Section C of the existing permit (Permit No. 03059T46)

D. Two aggregate conveyors (ID Nos. ES-21a and ES-21b) and water sprays (ID No. CD-21a and CD-21b) and three slate shuttle conveyors (ID Nos. ES-24a, ES-24ba and ES-24bb)

1. Applicable Regulatory Requirements:

- 15A NCAC 2D .0511: Particulates from Lightweight Aggregate Processes
- 15A NCAC 2D .0521: Control of Visible Emissions
- 15A NCAC 2D .0530: Prevention of Significant Deterioration
- 15A NCAC 2D .0540: Particulates from Fugitive Dust Emission
- 15A NCAC 2D .1100: Control of Toxic Air Pollutants
- 15A NCAC 2Q .0711: TAP Procedures - Emission Rates Requiring a Permit

E. Coal conveyor (ID No. ES-22)

1. Applicable Regulatory Requirements:

- 15A NCAC 2D .0511: Particulates from Lightweight Aggregate Processes
- 15A NCAC 2D .0521: Control of Visible Emissions
- 15A NCAC 2D .0530: Prevention of Significant Deterioration
- 15A NCAC 2D .0540: Particulates from Fugitive Dust Emission
- 15A NCAC 2D .1100: Control of Toxic Air Pollutants
- 15A NCAC 2Q .0711: TAP Procedures - Emission Rates Requiring a Permit

F. Screening operation consisting of one triple deck screen (ID No ES-13).

1. Applicable Regulatory Requirements:

- 15A NCAC 2D .0511: Particulates from Lightweight Aggregate Processes
- 15A NCAC 2D .0521: Control of Visible Emissions

G. Crushing, screening and handling equipment (ID No. ES-29) including crusher (T-3), screens (DD-4 and TD-4), conveyors (21c, 41a through 44a, and 95 through 107) and water sprays (ID No. CD-29)

1. Applicable Regulatory Requirements:

- 15A NCAC 2D .0511: Particulates from Lightweight Aggregate Processes
- 15A NCAC 2D .0521: Control of Visible Emissions
- 15A NCAC 2D .0540: Particulates from Fugitive Dust Emission
- 15A NCAC 2D .1100: Control of Toxic Air Pollutants
- 15A NCAC 2Q .0711: TAP Procedures - Emission Rates Requiring a Permit

7. NSPS, NESHAP/MACT, NSR/PSD, 112(r), CAM

NSPS

This facility is subject to New Source Performance Standards (NSPS), 40 CFR 60. The permit condition has been modified to reflect the current language and the facility is expected to be in compliance.

- 15A NCAC 2D .0524: New Source Performance Standards [40 CFR 60, Subpart UUU - Standards of Performance for Calciners and Dryers in Mineral Industries] is applicable to Kiln No. 7. The facility is required to comply with all applicable provisions including the notification, testing, reporting, record-keeping, and monitoring requirements.
- 15A NCAC 2D .0524: New Source Performance Standards [40 CFR Part 60, Subpart OOO] does not appear to apply since it has been determined the LWA plant is **NOT** part of a nonmetallic mineral processing plant with primary crushing.

NESHAP/MACT

This facility is a minor source for HAPs emissions and is **NOT** subject to any major source MACTs. This permit renewal does not change this status.

NSR/PSD

The facility is a major for PSD as defined in 40 CFR 51.166 thus with any new sources and changes in the “method of operation” must be considered as a possible “major modification. There is **NO** potential increase in any PSD regulated pollutants above the major source threshold under this permit renewal.

112(r)

This facility is **NOT** subject to the requirements of the Chemical Accident Release Prevention Program, Section 112(r) of the Clean Air Act requirements. This permit renewal does not change this status.

Compliance assurance Monitoring (CAM)

Pursuant to 40 CFR 64.2, the provisions of the Compliance Assurance Monitoring (CAM) rule are applicable to emission units that meet all of the following criteria:

Criteria #1: The unit is subject to an emission limitation AND uses a control device to achieve compliance with the limit;

Criteria #2: The unit has pre-control potential emissions that are equal to or greater than 100% of the amount (in tpy) required for a source to be classified as a major source (i.e., 100 tpy of any criteria pollutant or 10 tpy of any HAP, North Carolina); and,

Criteria #3: The unit is not exempt under 40 CFR 64.2(b).

The current permit includes the CAM plan for the emissions of PM₁₀ and SO₂ from seven kilns (ES-1 through ES-6 and ES-17).

The following table summarizes CAM applicability at Carolina Stalite:

Emission Unit	Criteria #1: Does the Source Use a Control Device?	Criteria #2: Pre-control PTE ≥100% of major source thresholds?	Criteria #3: Exempt Under 40 CFR 64.2(b)?	CAM Source?
ES-1	SO ₂ ; CD-1a (lime injection) PM ₁₀ ; CD-1b (fabric filter)	Yes (SO ₂ and PM ₁₀)	SO ₂ : No PM ₁₀ : No	SO ₂ : Yes PM ₁₀ : Yes
ES-2	SO ₂ ; CD-2a (lime injection) PM ₁₀ ; CD-2b (fabric filter)	Yes (SO ₂ and PM ₁₀)	SO ₂ : No PM ₁₀ : No	SO ₂ : Yes PM ₁₀ : Yes
ES-3	SO ₂ ; CD-3a (lime injection) PM ₁₀ ; CD-3b (fabric filter)	Yes (SO ₂ and PM ₁₀)	SO ₂ : No PM ₁₀ : No	SO ₂ : Yes PM ₁₀ : Yes
ES-4	SO ₂ ; CD-4a (lime injection) PM ₁₀ ; CD-4b (fabric filter)	Yes (SO ₂ and PM ₁₀)	SO ₂ : No PM ₁₀ : No	SO ₂ : Yes PM ₁₀ : Yes
ES-5	SO ₂ ; CD-5a (lime injection) PM ₁₀ ; CD-5b (fabric filter)	Yes (SO ₂ and PM ₁₀)	SO ₂ : No PM ₁₀ : No	SO ₂ : Yes PM ₁₀ : Yes
ES-6	SO ₂ ; CD-6a (lime injection) PM ₁₀ ; CD-6b (fabric filter)	Yes (SO ₂ and PM ₁₀)	SO ₂ : No PM ₁₀ : No	SO ₂ : Yes PM ₁₀ : Yes
ES-17	SO ₂ ; CD-17a (lime injection) PM ₁₀ ; CD-17b (fabric filter)	Yes (SO ₂ and PM ₁₀)	SO ₂ : No PM ₁₀ : No	SO ₂ : Yes PM ₁₀ : Yes
ES-8	PM ₁₀ ; CD-7a, b (fabric filters)	No	-	No
ES-8	PM ₁₀ ; CD-8 (fabric filter)	No	-	No
ES-9	PM ₁₀ ; CD-9 (fabric filter)	No	-	No
ES-10	PM ₁₀ ; CD-10 (fabric filter)	No	-	No
ES-16	PM ₁₀ ; CD-16 (fabric filter)	No	-	No
ES-11	PM ₁₀ ; CD-11 (water sprays)	No	-	No
ES-12	PM ₁₀ ; CD-12 (water spray)	No	-	No

ES-23a	PM ₁₀ ; CD-23a (water spray)	No	-	No
ES-23b	PM ₁₀ ; CD-23b (water spray)	No	-	No
ES-25	No	-	-	No
ES-26a	PM ₁₀ ; CD-26a (water spray)	No	-	No
ES-27	No	-	-	No
ES-28	No	-	-	No
ES-19	PM ₁₀ ; CD-19 (fabric filter)	No	-	No
ES-21a	PM ₁₀ ; CD-21a (water spray)	No	-	No
ES-21b	PM ₁₀ ; CD-21b (water spray)	No	-	No
ES-24a	No	-	-	No
ES-24b	No	-	-	No
ES-22	No	-	-	No
ES-13	PM ₁₀ (water spray)	No	-	No

CAM plans for the seven kilns (ID Nos. ES-1 through ES-6 and ES-17) are currently approved. These plans cover the emissions of SO₂ and PM₁₀ emissions.

The CAM plans for these kilns require weekly visible emission observations (or daily observations at Kiln No. 2 when the lime injection chamber (ID No. CD-LIC) is in use. In addition, the Permittee is required to conduct inspections of the associated bagfilters (ID Nos. CD-1b through CD-6b). An excursion is defined as each time visible emissions are observed. Within 24-hours of any excursion, the CAM plan requires that the Permittee (1) perform an inspection of the bagfilter, including but not limited to a visual inspection of the system ductwork and material collection unit for leaks and (2) initiate any required maintenance on the bagfilter as identified during the inspection.

8. Facility-Wide Air Toxics:

The permit contains modeled emission limits for Toxic Air Pollutants (TAPs) from the lightweight aggregate rotary expanding kilns (ES-1 through ES-6 and ES-17) and facility-wide emission sources. This permit includes emission limitations for Chromium (VI) for existing kilns (ES-1 through ES-6 and ES-17). Please, refer to "Permit No. 03059T45" for complete details.

The facility has previously demonstrated emissions of nickel are below their Toxics Permitting Emission Rates, in accordance with 02Q.0711.

9. Facility Emission Review:

There are no changes in potential emissions under this permit renewal. Actual emissions for 2010 through 2014 are reported in the header of this permit review.

10. Public Notice/EPA and Affected State(s) Review

A notice of the DRAFT Title V Permit shall be made pursuant to 15A NCAC 02Q .0521. The notice will provide for a 30-day comment period, with an opportunity for a public hearing. Copies of the public notice shall be sent to persons on the Title V mailing list and EPA. Pursuant to 15A NCAC 02Q .0522, a copy of each permit application, each proposed permit and each final permit pursuant shall be provided to EPA. Also pursuant to 02Q .0522, a notice of the DRAFT Title V Permit shall be provided to each affected State at or before the time notice provided to the public under 02Q .0521 above. South Carolina and local programs: Mecklenburg county and Forsyth county are within 50 miles of the facility and will be notified accordingly.

11. Other Regulatory Considerations:

- No application fee is required with this application.
- A Professional Engineers Seal is not required with this application.
- A zoning consistency determination is not required for this application.
- A 30-day public notice and 45-day EPA review is required for this application.

12. Recommendations/Conclusion:

DAQ recommends the issuance of Air Permit No. 03059/T47 to Carolina Stalite Company.